PATENT

Docket: CU-3831

Application Serial No. 10/501,043 Reply to final office action of July 29, 2009

REMARKS/ARGUMENTS

Reconsideration is respectfully requested.

Claims 171-226 are pending before this amendment. By the present amendment, claim 171 is <u>amended</u>. No new matter has been added.

In the office action (page 2), claims 171-226 stand rejection under 35 U.S.C. § 112, ¶2 as being indefinite. Specifically, the examiner indicates that given the context of claim 1, it is unclear what is meant by the term "infrastructure."

In response, the applicants have amended the term infrastructure both from the preamble and the body of claim 171, and have amended claim 171 as follows:

-A system <u>for facilitating telecommunication capability for electromagnetic propagation medium comprising:</u>

a signal medium;

a systematic and distributed signal conditioner comprising transponders, the transponders at least including repeaters, coupler arrangements, and necessary carrier frequency converters and transponder output level controls, wherein the signal medium uses the systematic and distributed signal conditioner for enabling utilization of the signal medium; and

transponder interfaces connected to a D/A and A/D physical layer (PHY).--

We can understand that "infrastructure" from the previously filed claims may be interpreted as fairly broad term, as it could be interpreted as including power distribution, roadway, sewer, and a number of other networks. One practical definition of the invention is a system using conditioners that can make a sewer pipe system into a telecommunication system although the most imminent example would perhaps be a utility power grid turned into a telecommunication system.

Specific support for the --electromagnetic propagation medium-- is found throughout the entire specification, but the applicants would like direct the examiner to the following specific instances of support:

- Specification page 1, lines 20-25
 - o "Modern digital data communication has put forward a tremendous need for expanded and improved infrastructure in two-way access networks
- Specification page 5, lines 22-27
 - Application of the present invention to "facilitate substantial high frequency analogue cascaded gain to existing and new systems and infrastructure

Application Serial No. 10/501,043 Reply to final office action of July 29, 2009

PATENT Docket: CU-3831

used or useful for communication where traditionally acceptable port isolation is impractical or intrinsically prevented"

- Specification page 5, lines 29-32
 - "Provide novel solutions that will improve existing communication infrastructure or facilitate communication infrastructure that otherwise was not intended for use as communication infrastructure."
- Specification page 5, line 33 to page 6, line 5
- Specification page 6, lines 24-29
 - o Cable model or long range Ethernet on power line grids and wires
- Specification page 7, lines 20-22
- Specification page 10, lines 30-32
- Specification page 11, lines 19-27
 - By facilitating wide bandwidth communication on global infrastructures like power grids circuits
 - "Wherever power cables or wires are present, the invention makes it possible to provide backbone infrastructure for a base station"
- Specification page 16, line 24 to page 17, line 12; FIG. 8
 - o Description of types of transmission medium
- Specification page 20, lines 20-22
 - "The application hereof may be in power cable or wire systems as well as wireless systems"
- Specification page 23, lines 7-11
 - o "The invention facilitates the entire structure of power cables and wires in a community being used as a communication network"

The applicants submit that the above referenced portions of the specification clearly provide context for the —electromagnetic propagation medium— as an "infrastructure" according to the present application. Since the —electromagnetic propagation medium— is considered to fall within the scope of an "infrastructure", the applicants submit that no new search should be required. Should the examiner have any further questions or concerns please do not hesitate to contact the undersigned.

In the office action (page 3), all claims are indicated as allowable if the §112, ¶2 rejections to claim 171 are overcome. The applicant respectfully thanks the examiner for this indication of allowable subject matter, and submits that, at least for the reasons above, all grounds for rejection are considered overcome.

For the reasons set forth above, the applicant respectfully submits that claims 171-226, pending in this application, are in condition for allowance over the cited references. Accordingly, the applicant respectfully requests reconsideration and

Application Serial No. 10/501,043 Reply to final office action of July 29, 2009

PATENT Docket: CU-3831

withdrawal of the outstanding rejections and earnestly solicits an indication of allowable subject matter.

This amendment is considered to be responsive to all points raised in the final office action. Should the examiner have any remaining questions or concerns, the examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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